



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/767,446	01/29/2004	Deborah Lewandowski Barclay	LUC-455/Barclay 7-52-6-7-	6451
47382	7590	06/13/2008	EXAMINER	
PATTI , HEWITT & AREZINA LLC ONE NORTH LASALLE STREET 44TH FLOOR CHICAGO, IL 60602			HUYNH, CHUCK	
			ART UNIT	PAPER NUMBER
			2617	
			MAIL DATE	DELIVERY MODE
			06/13/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/767,446	Applicant(s) BARCLAY ET AL.	
	Examiner CHUCK HUYNH	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 May 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 14-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9, 14-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-9, 14-24 have been considered but are moot in view of the new ground(s) of rejection.

Regarding the added limitation of "wherein the initial address message comprise an indicator for a barge-in service request," it is known that Harrison discloses a request for barge-in service (Col 6, lines 6-17) and Lannto discloses the ISUP messages containing a plurality of information such as how to handle the call, like transferring capability (Col 5, lines 13-25) and therefore can be combined with Harrison to include barge-in capability, it would have been obvious to one ordinarily skilled in the art for the incorporation of the arts to provide barge-in capability. Furthermore, the parts suggested to disclose this limitation in the specification (Page 7, lines 11-15) also suggests that the indicator can be an authorization code for the service which is also disclosed by Harrison (Col 6, lines 6-20).

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 20 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claim is directed to claim a signal, which is non-statutory. Applicant's specification recites: the computer-readable signal-bearing medium comprises a modulated carrier signal transmitted over a network comprising or coupled with the apparatus 100, for instance, one or more of a telephone network, a local area network ("LAN"), the internet, and a wireless network.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claims 1-4, 6-9, 12, 13, and 15, 16, and 18-20, 23, 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harrison et al. (US 6418216; hereinafter Harrison) in view of Chow et al. (US 6470179; hereinafter Chow) in further view of Lantto (US 5867784).**

Regarding claim 1, Harrison discloses an apparatus, comprising:

a switching component that performs a barge-in that allows a first user of a priority communication device (priority-having authentication code: Col 6, lines 15-16) to communicate with a second user of a mobile communication device that is engaged in a pre-existing active call (Col 5, lines 48-59; Figs. 1 and 2); and

wherein the mobile switching component employs the special handling type to perform the barge-in (using an authorization code to perform barge-in: Col 6, lines 13-17).

Harrison discloses all the barge-in process in the particulars of the claim except for a mobile switching component, and

wherein the mobile switching component receives a call request from the priority communication device that comprises an integrated services digital network user part (ISUP) initial address message (IAM); and

wherein the initial address message comprises an indicator for a barge-in service request; and

wherein the mobile switching component employs the indicator to perform the barge-in

However, Chow does disclose the limitations of

wherein the mobile switching component receives a call request from the priority communication device that comprises an integrated services digital network user part (ISUP) initial address message (IAM) (Col 17, line 53 – Col 18, line 3); and

wherein the mobile switching component employs the indicator to perform the barge-in (Harrison discloses the switch employing the authorization code to perform

barge-in: Col 6, lines 13-30; in combination with Chow's disclosure of a mobile switching barge-in service, it would be obvious to one ordinarily skilled in the art to correlate a switch from Harrison to be a mobile switch in Chow for performing barge-in service in a mobile environment (Fig. 1).

Even though ISUP IAM is well known in the art, Harrison in view of Chow does not distinctively disclose wherein the initial address message comprises an indicator for a barge-in service request.

Even though it is known in the art and also disclosed by Lannto (Col 5, lines 13-25) that the ISUP IAM can contain various parameters such as a network code, or in this case in combination with Harrison an indication (Harrison: Col 6, lines 15-16) of barge-in service; therefore regarding the limitation of

“wherein the initial address message comprise an indicator for a barge-in service request,” it is known that Harrison discloses a request for barge-in service (Col 6, lines 6-17) and Lannto discloses the ISUP messages containing a plurality of information such as how to handle the call, like transferring capability (Col 5, lines 13-25) and therefore can be combined with Harrison to include barge-in capability, it would have been obvious to one ordinarily skilled in the art for the incorporation of the arts to provide barge-in capability.

Regarding claims 2, Harrison discloses the apparatus of claim 1, wherein the mobile switching component communicates one or more indications (waiting tones) of

the barge-in to the second user of the mobile communication device (Col 5, lines 48-59).

Regarding claim 3, Harrison discloses the apparatus of claim 2, wherein the one or more indications comprise one or more in-band indications of the barge-in, wherein the mobile switching component cooperates with the mobile communication device to communicate the one or more in-band indications (voice channel or audio waiting tone) of the barge-in to the second user of the mobile communication device (Col 8, lines 1-6).

Regarding claim 4, Harrison discloses the apparatus of claim 2, wherein the one or more indications comprise one or more out-of-band indications of the barge-in, wherein the mobile switching component cooperates with the mobile communication device to communicate the one or more out-of- band indications (data channel/messages) of the barge-in to the second user of the mobile communication device (Col 11, lines 24-36).

Regarding claim 6, Harrison discloses the apparatus of claim 1, wherein the preexisting active call comprises a preexisting active call between the mobile communication device and one or more additional communication devices (Col 5, lines 48-59);

wherein the mobile switching component performs the barge-in to allow the first user to participate in the preexisting active call between the mobile communication device and the one or more additional communication devices (conference call) (Col 8, lines 1-6).

Regarding claim 7, Harrison discloses the apparatus of claim 6, wherein the mobile switching component communicates one or more indications of the barge-in to the one or more additional communication devices (Col 8, lines 1-6).

Regarding claim 8, Harrison discloses the apparatus of claim 6, wherein the mobile switching component communicates one or more indications of the barge-in to the mobile communication device and the one or more additional communication devices (Col 8, lines 1-6).

Regarding claims 9, Harrison discloses the apparatus of claim 6, wherein the mobile switching component places one or more of the one or more additional communication devices on hold for a duration of the barge-in (Col 6, lines 36-37; Col 8, lines 9-12).

Regarding claim 12, Harrison discloses the apparatus of claim 1, wherein the mobile switching component employs one or more priority user designations from the

second user to perform a determination that the first user is a priority user (this is done with a password) (if the caller knows the password, then the caller is of priority) (Col 7, lines 56-67);

wherein upon the determination that the first user is a priority user, the mobile switching component performs the barge-in to allow the priority user to communicate with the second user (Col 7, lines 56 – Col 8, lines 1-6).

Regarding claim 13, Harrison discloses the apparatus of claim 1 , wherein the mobile switching component receives a request to perform the barge-in from an operator that acts on behalf of the first user (Col 1, lines 6-35);

wherein the mobile switching component employs the request to perform the barge-in to allow the first user to communicate with the second user (Col 7, lines 65 – Col 8, lines 1-6).

Regarding claim 23, Lantto discloses the apparatus of claim 1, wherein the indicator comprise a calling party category ISUP parameter of the initial address message (Col 5, lines 13-25).

Regarding claim 24, Harrison discloses the apparatus of claim 1, wherein the indicator comprises an operator service information parameter that indicates a special handling type to request the barge-in service (the authorization cod is an indication of wanted to gain barge-in service: Col 6, lines 6-20)

Regarding claim 15, Harrison discloses a method, comprising the step of:
receiving a call request from a first user (Col 5, lines 48-50); and
performing, by a mobile switching component, a barge-in through employment of the special handling type value (the application of barge-in service Col 5, line 53) that allows a first user to communicate with a second user that is engaged in a preexisting active call (Col 5, lines 47-59).

Harrison discloses all the barge-in process in the particulars of the claim except for a mobile device, and

wherein the mobile switching component receives a call request from the priority communication device that comprises an integrated services digital network user part (ISUP) initial address message (IAM); and

wherein the initial address message comprises an indicator for a barge-in service request; and

wherein the mobile switching component employs the indicator to perform the barge-in

However, Chow does disclose the limitations of

wherein the mobile switching component receives a call request from the priority communication device that comprises an integrated services digital network user part (ISUP) initial address message (IAM) (Col 17, line 53 – Col 18, line 3); and

wherein the mobile switching component employs the indicator to perform the barge-in (Harrison discloses the switch employing the authorization code to perform

barge-in: Col 6, lines 13-30; in combination with Chow's disclosure of a mobile switching barge-in service, it would be obvious to one ordinarily skilled in the art to correlate a switch from Harrison to be a mobile switch in Chow for performing barge-in service in a mobile environment (Fig. 1).

Even though ISUP IAM is well known in the art, Harrison in view of Chow does not distinctively disclose wherein the initial address message comprises an indicator for a barge-in service request.

Even though it is known in the art and also disclosed by Lannto (Col 5, lines 13-25) that the ISUP IAM can contain various parameters such as a network code, or in this case in combination with Harrison an indication (Harrison: Col 6, lines 15-16) of barge-in service; therefore regarding the limitation of

“wherein the initial address message comprise an indicator for a barge-in service request,” it is known that Harrison discloses a request for barge-in service (Col 6, lines 6-17) and Lannto discloses the ISUP messages containing a plurality of information such as how to handle the call, like transferring capability (Col 5, lines 13-25) and therefore can be combined with Harrison to include barge-in capability, it would have been obvious to one ordinarily skilled in the art for the incorporation of the arts to provide barge-in capability.

Regarding claim 16, Harrison discloses the method of claim 15, wherein the step of performing the barge-in that allows the first user to communicate with the second

Art Unit: 2617

user of the mobile communication device that is engaged in the preexisting active call comprises the steps of:

determining that the first user is a priority user (if the caller knows the password, then the caller is of priority) (Col 7, lines 56-67); and

bridging a call leg of the priority user with a call leg of the second user (Abstract; Col 6, lines 51-60).

Regarding claim 18, Harrison discloses the method of claim 15, further comprising the step of:

communicating one or more indications of the barge-in to the mobile communication device (Col 5, lines 48-59).

Regarding claim 19, Harrison discloses the method of claim 15, wherein the preexisting active call comprises a preexisting active call between the mobile communication device and one or more additional communication devices, the method further comprising the step of:

placing one or more of the one or more additional communication devices on hold for a duration of the barge-in (Col 6, lines 36-37; Col 8, lines 9-12).

Regarding claim 20, Harrison discloses an article comprising:

one or more computer-readable signal-bearing media (data storage within the telephone system apparatus to store data for use in verification process Col 1, lines 44+, Col 7, lines 56+); and

means in one or more media for receiving a call request from a first user (Col 5, lines 48-50); and

means in the one or more media for performing, by a mobile switching component, a barge-in through employment of the special handling type (the application of barge-in service Col 5, line 53) to allow the first user to participate in a preexisting active call with a second user of a mobile communication device (Col 5, lines 47-59).

Harrison discloses all the barge-in process in the particulars of the claim except for a mobile device, and

wherein the mobile switching component receives a call request from the priority communication device that comprises an integrated services digital network user part (ISUP) initial address message (IAM); and

wherein the initial address message comprises an indicator for a barge-in service request; and

wherein the mobile switching component employs the indicator to perform the barge-in

However, Chow does disclose the limitations of

wherein the mobile switching component receives a call request from the priority communication device that comprises an integrated services digital network user part (ISUP) initial address message (IAM) (Col 17, line 53 – Col 18, line 3); and

wherein the mobile switching component employs the indicator to perform the barge-in (Harrison discloses the switch employing the authorization code to perform barge-in: Col 6, lines 13-30; in combination with Chow's disclosure of a mobile switching barge-in service, it would be obvious to one ordinarily skilled in the art to correlate a switch from Harrison to be a mobile switch in Chow for performing barge-in service in a mobile environment (Fig. 1).

Even though ISUP IAM is well known in the art, Harrison in view of Chow does not distinctively disclose wherein the initial address message comprises an indicator for a barge-in service request.

Even though it is known in the art and also disclosed by Lannto (Col 5, lines 13-25) that the ISUP IAM can contain various parameters such as a network code, or in this case in combination with Harrison an indication (Harrison: Col 6, lines 15-16) of barge-in service; therefore regarding the limitation of

"wherein the initial address message comprise an indicator for a barge-in service request," it is known that Harrison discloses a request for barge-in service (Col 6, lines 6-17) and Lannto discloses the ISUP messages containing a plurality of information such as how to handle the call, like transferring capability (Col 5, lines 13-25) and therefore can be combined with Harrison to include barge-in capability, it would have been obvious to one ordinarily skilled in the art for the incorporation of the arts to provide barge-in capability.

3. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Harrison et al. (US 6418216; hereinafter Harrison) in view of Chow et al. (US 6470179; hereinafter Chow) in further view of Lantto (US 5867784) in further view of Bales et al (US 5590127; hereinafter Bales).

Regarding claim 5, Harrison discloses the apparatus of claim 2, wherein the one or more indications comprise an entry indication and an exit indication, wherein the mobile switching component cooperates with the mobile communication device to communicate the entry indication to the second user upon a start of the barge-in (Col 8, lines 1-6).

Even though Harrison discloses all the particulars of the claim, Harrison in view of in view of Chow further in view of Lantto does not disclose wherein the mobile switching component cooperates with the mobile communication device to communicate the exit indication to the second user of the mobile communication device upon an end of the barge-in.

However, Bales does disclose sending a notification message to users, informing of the end of call conference. At the start of the barge-in the users were in a conference call state and when a particular terminal is not in the conference state, hence the end of the barge-in, other users are notified (Col 20, lines 48-65).

It would have been obvious to one ordinarily skilled in the art at the time of invention to incorporate Bales' disclosure to provide better of conference communication state and to keep users informed of the communication status.

3. Claims 14, 17, 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harrison et al. (US 6418216; hereinafter Harrison) in view of Chow et al. (US 6470179; hereinafter Chow) in further view of Lantto (US 5867784) in further view of Vishwanathan et al. (US 2003/0017836).

Regarding claim 14, Vishwanathan discloses the apparatus of claim 1, wherein the mobile switching component (Fig. 1) comprises:

a home mobile switching center for the mobile communication device, wherein the home mobile switching center receives a request for the barge-in (Page 1, [0005]; Page 6, [0071]), the apparatus further comprising:

a visited mobile switching center for the mobile communication device (Page 1, [0005]);

wherein the home mobile switching center identifies the visited mobile switching center through employment of the home location register (Fig. 1);

wherein the home mobile switching center and the visited mobile switching center cooperate to perform the barge-in to allow the first user to participate in the preexisting active call with the second user of the mobile communication device (Page 6, [0071]).

Regarding claim 17, Harrison discloses the method of claim 16, further comprising the step of:

wherein the step of bridging the call leg of the priority user with the call leg of the second user (Col 6, lines 51-60) comprises the step of:

cooperating with a switch to bridge the call leg of the priority user with the call leg of the second user (Col 7, lines 65 – Col 8, lines 1-12).

Harrison discloses all the particulars of the claim except a switch being a visited mobile switching center; and

identifying a visited mobile switching center that is synchronized with the mobile communication device through employment of a home location register;

However, Vishwanathan does disclose a switch being a visited mobile switching center (Fig. 1) and identifying a visited mobile switching center that is synchronized with the mobile communication device through employment of a home location register (Fig. 1);

It would have been obvious to one ordinarily skilled in the art at the time of invention to incorporate Vishwanathan's disclosure to expand the system to a mobile network and provide communication for mobile users.

Regarding claim 21, Harrison discloses the method of claim 15, wherein the step of performing the barge-in through employment of the mobile switching component that allows the first user to communicate with the second user of the mobile communication device that is engaged in the preexisting active call comprises the steps of:

determining a mobile identification number of the mobile communication device (Col 1, lines 37-67);

requesting from a home location register a location of and/or route to the mobile communication device through employment of the mobile identification number (Col 1, lines 37-67; Col 2, lines 19-32);

bridging a call leg of the priority user with a call leg of the second user (Col 6, lines 55+);

sending a confirmation message of the bridging of the call legs to the priority user (Col 8, lines 1-6; Col 9, lines 18+).

Harrison discloses all the particulars of the claim except for the limitations of receiving a temporary local directory number from the home location register (Page 9, [0115]).

However, Vishwanathan does disclose receiving a temporary local directory number (TLDN) from the home location register (Page 9, [0115]).

It would have been obvious to one ordinarily skilled in the art at the time of invention to incorporate Vishwanathan's mobile network with the PSTN to establish communication and connectivity (Vishwanathan: Fig. 7, no. 1070; Page 1, [0005], [0009]; Page 10, [0116]).

Regarding claim 22, Harrison discloses the method of claim 21, wherein the step of bridging the call leg of the priority user with the call leg of the second user comprises the step of:

forwarding the confirmation of the call request to the priority user (Col 9, lines 18+);

wherein the step of sending the confirmation message of the bridging of the call legs to the priority user comprises the steps of:

receiving a confirmation of the bridging of the call leg of the priority user with the call leg of the second user (Col 8, lines 5+);

forwarding the confirmation of the bridging to the priority user (Col 9, lines 18+).

Harrison does disclose the limitation of receiving a confirmation of the call request from another switch within the system (Col 6, lines 55+; Col 9, lines 18+), but not from a visited mobile switching center; furthermore, Harrison is unclear about the limitation of sending a call request to a visited mobile switching center, wherein the call request comprises the temporary local directory number, wherein the visited mobile switching center performs the bridging of the call leg of the priority user with the call leg of the second user.

However, Vishwanathan discloses roaming services incorporating mobile switching centers (home MSC and serving/visiting MSC Page 1, [0005], [0012]) and furthermore, discloses sending a call request to a visited mobile switching center, wherein the call request comprises the temporary local directory number, wherein the visited mobile switching center performs the bridging of the call leg of the priority user with the call leg of the second user (Page 9, [0113] – [0115]). Therefore, Vishwanathan is combined to disclose a mobile switching component (MSC), which is used to provide group/conference calls among mobile communication devices, as well as having barge-in service capability (Page 4, [0050]+; Fig. 7; Page 6, [0071]; Page 9, [0115]). Even though Harrison's system is used within the PSTN (Harrison: Fig. 2).

It would have been obvious to one ordinarily skilled in the art at the time of invention to incorporate Vishwanathan's mobile/roaming network with the PSTN to establish communication and connectivity (Vishwanathan: Fig. 7, no. 1070; Page 1, [0005], [0009]; Page 10, [0116]).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHUCK HUYNH whose telephone number is (571)272-7866. The examiner can normally be reached on M-F 8am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duc Nguyen can be reached on 571-272-7503. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 10/767,446
Art Unit: 2617

Page 20

Chuck Huynh

/Duc Nguyen/

Supervisory Patent Examiner, Art Unit 2617